## Maryland Historical Trust

Maryland Historical 11 ust						
Maryland Inventory of Historic Properties number:						
Name: VM Z+CUEL	r.Cuck.					
The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.						
MARYLAND HISTORICAL TRUST  Eligibility RecommendedX Eligibility Not Recommended						
Criteria:AB \CD Considerations:A						
Comments:						
Comments:						
Reviewer, OPS:_Anne E. Bruder	Date:3 April 2001					

MARYLAND INVENTORY OF HISTORIC BRIDGES HISTORIC BRIDGE INVENTORY MARYLAND STATE HIGHWAY ADMINISTRATION/ MARYLAND HISTORICAL TRUST

MHT No. <u>HA-1576</u>

SHA Bridge No. 12016 Bridge name MD 24 over Deer Creek
LOCATION: Street/Road name and number [facility carried] MD 24
City/town Rocks Vicinity X
County Harford
This bridge projects over: Road Railway Water X Land
Ownership: State X County Municipal Other
HISTORIC STATUS: Is bridge located within a designated historic district? YesNo X  National Register-listed district National Register-determined-eligible district  Locally-designated district Other
Name of district
BRIDGE TYPE: Timber Bridge: Beam Bridge: Truss -Covered Trestle Timber-And-Concrete
Stone Arch Bridge
Metal Truss Bridge X
Movable Bridge: Swing Bascule Single Leaf Bascule Multiple Leaf Vertical Lift Retractile Pontoon
Metal Girder:  Rolled Girder Rolled Girder Concrete Encased  Plate Girder Plate Girder Concrete Encased
Metal Suspension
Metal Arch
Metal Cantilever
Concrete: Concrete Arch Concrete Slab Concrete Beam Rigid Frame
Other Type Name

H4-1576

### **DESCRIPTION:**

### **Describe Setting:**

Bridge 12016 carries MD state Route 24 over Deer Creek. Route 24 runs in a north-south direction as it crosses Deer Creek. Deer Creek, a tributary to the Susquehanna River, runs west to east. The area, which lies just north of Rocks State Park, is rural with both farmland and wooded areas. Just northeast of the bridge are the remains of a stone barn. A business on the same property bears the sign reading "LaGrange Iron Works 1870". It is assumed the property dates to that period.

### **Describe Superstructure and Substructure:**

This single span, skewed, five panel, Pratt through truss is of riveted construction. Total span length is 123 feet. Centerline of truss to centerline of truss width is 33 feet. The top chord, bottom chord, and end posts are built-up latticed elements. Vertical and diagonal members are rolled I shapes. Top chord bracing and portal bracing are primarily rolled shapes with some built-up and latticed members. The deck is a floorbeam and stringer system with angle section cross bracing and a concrete deck. The railing along each truss constructed of pipe and angles is original. The abutments and wingwalls are concrete. A plaque on the end post identifies the manufacturer as the Fort Pitt Bridge Works, Pittsburgh PA, 1934.

### **Discuss Major Alterations:**

No significant alterations are apparent. However, the concrete deck is presumably not original.

# WHEN was bridge built (actual date or date range) 1934 This date is: Actual X Estimated Source of date: Plaque X Design plans X County bridge files/inspection form Why was bridge built? To provide a reliable crossing of Route 24 over Deer Creek, to meet local and regional transportation needs. WHO was the designer WHO was the builder Fort Pitt Bridge Works - builder and/or designer WHY was bridge altered? [check N/A X if not applicable] Was bridge built as part of organized bridge-building campaign? Yes X No This bridge was built under the aegis of the State Roads Commission as part of the Good Roads Movement. SURVEYOR/HISTORIAN ANALYSIS:

Was bridge constructed in response to significant events in Maryland or local history? No\_Yes\_X\_ If yes, what event?

This bridge may have National Register significance for its association with:

A - Events X B- Person C- Engineering/architectural character X

This bridge was one of a small but significant number of metal truss bridges erected in Maryland from the 1920s through the 1940s. Its heavy, solid construction reflects continuing advances in metal truss technology and fabrication early in the century, and the almost unyielding reliability of substantial trusses for major crossings. Such bridges were built throughout the state during the period, particularly

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in the early 1930s, as part of the Good Roads Movement promoted by the State Roads Commission. Many of them retain plaques indicating that they were built under the aegis of the Commission, even though they were designed by private bridge building firms.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth & development of the area? No  $\_\_$  Yes  $\underline{X}$ 

Because of their solidity and reliability, metal truss bridges with heavy members such as this bridge were often utilized in Maryland from the 1920s through the 1940s at long crossings. Multi-lane facilities carrying major thoroughfares, they had not only a significant impact on local growth, but facilitated regional residential, commercial, agricultural, and industrial development.

Is the bridge located in an area which may be eligible for historic designation? No X Yes \_\_\_\_\_\_ Would the bridge add to \_\_\_\_\_ or detract from \_\_\_\_\_ historic & visual character of the possible district?

Is the bridge a significant example of its type? No \_ Yes X

Between 1840 and the Civil War, under the impetus of a rapidly expanding railroad system, the majority of early American metal truss bridge forms were patented and introduced. In Maryland, the earliest metal truss bridges carried rail lines, which required their great strength and reliability. From the War through the end of the century, metal truss technology was improved, steel began to replace iron, and the use of trusses was expanded to carry roads as well as rail lines.

Numerous metal truss bridges were erected in Baltimore, the original hub of the metal truss in the state, from the 1850s through the 1880s. From Baltimore, the use of the metal truss spread out to other parts of the state, particularly the Piedmont and Appalachian Plateau. Many bridge and iron works were established in the eastern United States to design and fabricate truss members, which were then shipped to sites in Maryland and elsewhere to be erected. More than 15 different bridge companies located in Maryland, Ohio, Pennsylvania, New York, Virginia, and Indiana are known to have shipped metal truss bridges to sites throughout Maryland. Bridges were first fabricated in Maryland, and shipped to sites within the state and beyond, by the companies of seminal bridge designer Wendel Bollman.

Early in the twentieth century, concrete bridges began to compete with metal truss bridges throughout the state at small to moderate crossings. With the development of uniform standards for concrete bridges by the State Roads Commission in the 1910s, the construction of smaller metal truss bridges significantly declined throughout the state. The metal truss still remained the bridge of choice for large crossings, however. In the 1920s, heavier members began to be used at these bridges. Reflecting even heavier load requirements and increased lengths, metal truss bridges erected in the state in the 1930s and 1940s were heavy and solid, rather than light and delicate like their late-nineteenth- and early-twentieth-century predecessors.

Numerous Pratt truss bridges were erected throughout the country between 1844, when the type was patented by Thomas and Caleb Pratt, and the early twentieth century. The Pratt has diagonals extended across one panel in tension and verticals in compression, except for hip verticals immediately adjacent to the inclined end posts of the bridge. The large majority of Maryland's surviving metal truss bridges are Pratts, built as through or pony trusses either riveted or pin-connected.

This bridge was erected during one of the three key periods (1840-1860, 1860-1900, and 1900-1960) of bridge construction in Maryland. Built in 1934, it falls within the period 1900-1960. During this era, metal truss highway bridges became increasingly standardized. Also during this period, smaller and moderate length trusses were gradually replaced by reinforced concrete structures, and the modern metal girder bridge, which could easily be widened, replaced the metal truss bridge at all but the largest approaches and crossings. Built after 1930, it is characterized by heavy solid members, rather than the relatively delicate members that characterized its late-nineteenth and early-twentieth century predecessors.

Does bridge retain integrity [in terms of National Register] of important elements described in Context Addendum? No  $\underline{\hspace{1cm}}$  Yes  $\underline{X}$ 

Is bridg	ge a significant	example of work	c of manufacturer	, designer a	nd/or engineer?	No	Yes_	<u>X</u>

In the early twentieth century, metal truss bridges were largely supplanted in the state by concrete and, later, metal girder structures. The old metal fabricators disappeared during this period. They were replaced, in the 1920s and 1930s, by a new if less numerous generation of metal truss fabricators. Among the new bridge companies active in Maryland was the Fort Pitt Bridge Works of Pittsburgh, Pennsylvania, which is known to have erected at least one bridge in the state in the 1930s.

Should bridge be given further study before significance analysis is made? No X Yes

It is believed that no further evaluation is necessary to determine the eligibility of this bridge for listing in the National Register. However, additional research, which could be conducted as part of any future National Register nomination prepared for the bridge, might provide further information about its history and environs.

### **BIBLIOGRAPHY:**

Bridge inspection reports and files of the Maryland State Highway Administration.

County survey files of the Maryland Historical Trust.

Jackson, Donald H. Great American Bridges and Dams. Washington, D.C: The Preservation Press, 1968

P.A.C. Spero & Company and Louis Berger & Associates, Inc. Historic Bridges in Maryland: Historic Context Report. Prepared for the Maryland State Highway Administration, September, 1994.

Pennsylvania Historical and Museum Commission and Pennsylvania Department of Transportation. *Historic Highway Bridges in Pennsylvania*. Commonwealth of Pennsylvania, 1986.

State inventory form HA-1576

### **SURVEYOR/SURVEY INFORMATION:**

Date bridge recorded 1/23/95

Name of surveyor John Tarquinio/Marvin Brown
Organization/Address GREINER, INC., 2219 York Road, Suite 200, Timonium, Maryland 21093-3111
Phone number 410-561-0100 FAX number 410-561-1150



HA-1576 HARFORD COUNTY, MD JOHN TARQUINIO 23 JAN 1995 MARYLAND SHPO SHA - BRIDGE 12016 OVER DEER CREEK - VIEW LOOKING NORTH ON MO ROUTE 24

114 15



HA-1576 HARFORD COUNTY, MO SHA PROUNTS 23 JAN 1995 MARYAND SHOOSHA - BRIDGE 12016 OVER DEER CREEK - VIEW LOOKING WEST

2/4 2/5



HA-1576 HARFORD COUNTY MIS VOHN TARQUINIO 23 JAN 1995 MARYIMAD SUPO SHA - BRIDGE 12016 OVER DEER CREEK - VIEW LOOKING EAST



HA-1576 HARFORD COUNTY MD VOHN TARRUINIO 23 JAN 1995 HARTEANIO SHED SHA - BRIDGE 12016 OVER DEER CREEK - VIEW LOOKING SOUTH AT END POST NAME PLATE

en de



HA-1576

HARFORD COUNTY MO

VOHN TARQUINO

23 JAN 1995

HARVEAND SHROSHA

- BRIDGE 12016 OVER DEER CREEK

- VIEW FROM BROGE LOOKING NORTH

AT REMNANTS OF STONE BARN

#/5

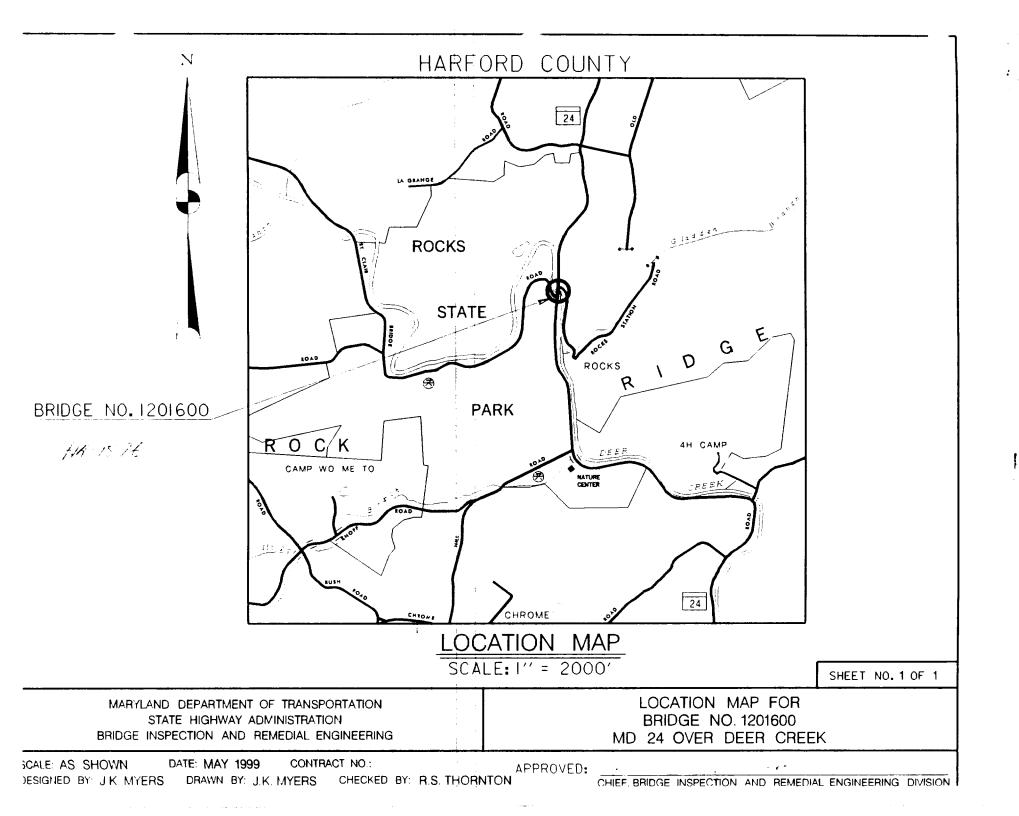
# MARYLAND HISTORICAL TRUST NR-ELIGIBILITY REVIEW FORM

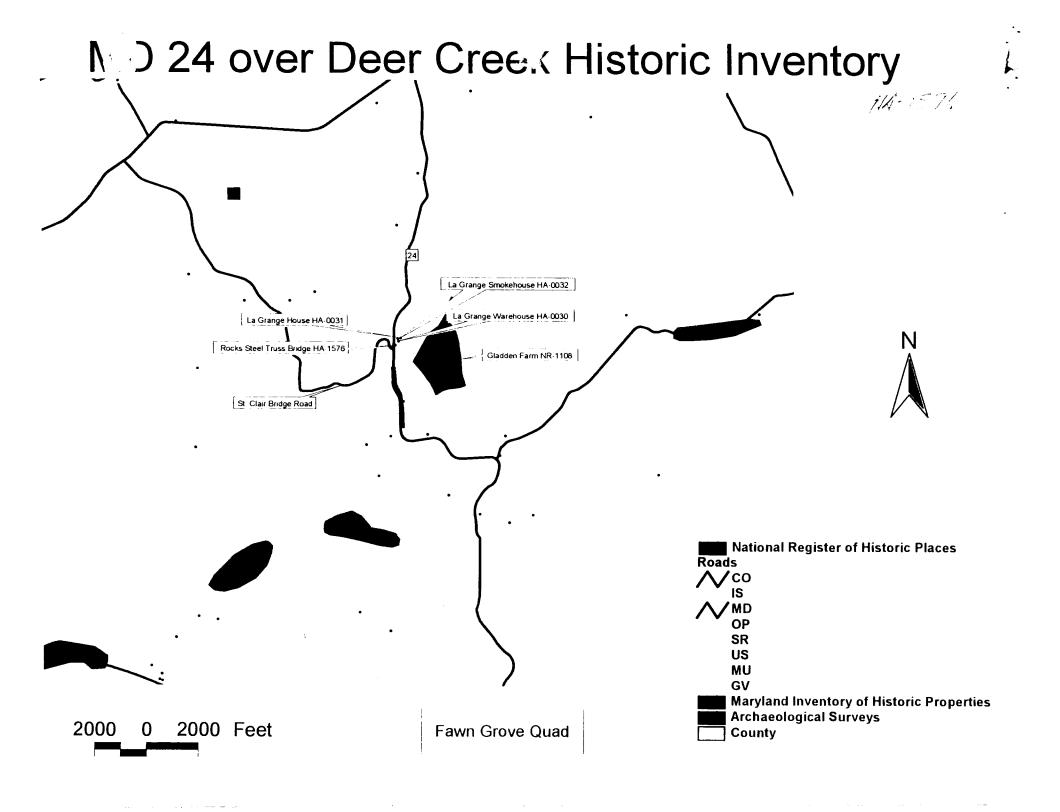
Property Name: Rocks Steel Truss Bridge, SHA Bridge Inventory Number: HA-1576
Address: MD 24 over Deer Creek, Rocks, Harford County, MD
Owner: Maryland State Highway Administration, 707 N. Calvert St. Baltimore, MD 21202
Tax Parcel Number: N/A Tax Map Number: N/A
Project Repairs to Bridge No. 12016  Agency State Highway Administration (SHA)
Site visit by SHA Staff: no X yes Name: Heather Confer Date: 10/18/1999
Eligibility recommended X Eligibility <b>not</b> recommended
CriteriaABCD Considerations:ABCDEFG X_None
Is property located within a historic district? X no _ yes Name of District:
Is district listed?: X no _ yes
Documentation on the property/district is presented in: Project Review and Compliance Files
Description of Property and Eligibility Determination (Use continuation sheet if necessary and attach map and photo)
The Rocks Steel Truss Bridge was built in 1934 by the Fort Pitt Bridge Works of Pittsburgh, Pennsylvania. It is a one span, skewed, Pratt through truss located on MD 24 over Deer Creek located adjacent to Rocks State Park and Camp Wo-To-Me. It was determined eligible by the interagency committee and assigned to the preservation pool category.  The Rocks Steel Truss Bridge is one of a small but significant number of metal truss bridges erected in Maryland from the 1920s through the 1940s. Its heavy, solid construction reflects continuing advances in metal truss technology and fabrication early in the century, and the almost unyielding reliability of substantial trusses for major crossings. It is eligible under Criterion C for its engineering signifance, as a good example of a Pratt through truss built in the 1930s when truss bridges were "chunkier" and less delicate than their earlier counterparts.  Prepared by Heather Confer, SHA 11/29/99
MARYLAND HISTORICAL TRUST REVIEW  Eligibility recommended Eligibility not recommended
Criteria: A B C D Consideration A B C D E F G None
1/22
12/1/99
Reviewer, Office of Preservation Services  Date
1512166
Reviewer, NR Program Date

Inventory No.	HA-1576	
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# PRESERVATION VISION 2000; THE MARYLAND PLAN FATEWIDE HISTORIC CONTEXTS

I.	Geographic Region:				
	Eastern Shore	(all Eastern Shore counties, and Cecil)			
	Western Shore	(Anne Arundel, Calvert, Charles,			
		Prince George's and St. Mary's)			
<u>X</u>	Piedmont	(Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)			
	Western Maryland	(Allegany, Garrett and Washington)			
II.	I. Chronological/Developmental Periods:				
	Rural Agrarian Intensification	A.D. 1680-1815			
	Agricultural-Industrial Transition	A.D. 1815-1870			
	Industrial/Urban Dominance	A.D. 1870-1930			
X		A.D. 1930- Present			
	Unknown Prehistoric				
	Unknown Historic				
IV.	Historic Period Themes:				
	Agriculture				
X	Architecture, Landscape Architecture,				
	and Community Planning				
	Economic (Commercial and Indu	astrial)			
	Government/Law				
	Military				
	Religion				
	Social Educational/Cultural				
<u>X</u>	Transportation				
V. ]	Resource Type:				
	Gr				
<u> </u>	egory: Structure				
Cate					
Hist	oric environment: Rural oric Function(s) and Use(s): Tra	nsportation			







HA-1576 Face - Anna Agreement



HA-1576 CHETTE WHILL I'M DA JUST HA-1576
Rocks Steel Truss Bridge
Rocks vicinity
public (unrestricted)

This bridge carries Maryland Route 24 over Deer Creek near Rocks, Maryland. It consists of a single skew three panel Pratt steel through truss, 123 feet in length. The portal bracing is of triangular trusses.

Erected in 1934, this structure was built by the Fort Pitt Bridge Works of Pittsburgh, Pennsylvania. The Rocks Steel Truss Bridge is one of six historic truss bridges -- part of Maryland's state road system in Harford County, and one of 26 bridges of the same general structural type throughout the state road network -- identified by the Maryland Historical Trust for the Maryland Department of Transportation in a jointly conducted survey which took place during 1980-81.

MAGI # 13:576317

# INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME				
HISTORIC				
AND/OR COMMON Rocks Stee	el Truss Bridge			
2 LOCATION	I	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
STREET & NUMBER				
city, town Rocks		MCINITY OF	CONGRESSIONAL DISTR	ICT
STATE		VICINITY OF	COUNTY	
Maryland			Harford	
3 CLASSIFIC	ATION			
CATEGORY	OWNERSHIP	STATUS	PRES	ENTUSE
DISTRICT	X_PUBLIC	X OCCUPIED	AGRICULTURE	MUSEUM
BUILDING(S)	PRIVATE	UNOCCUPIED	COMMERCIAL	PARK
X_STRUCTURE	ВОТН	WORK IN PROGRESS	EDUCATIONAL	PRIVATE RESIDENCE
SITE	PUBLIC ACQUISITION	ACCESSIBLE	ENTERTAINMENT	RELIGIOUS
_OBJECT	IN PROCESS	YES RESTRICTED	GOVERNMENT	SCIENTIFIC
	BEING CONSIDERED	X YES: UNRESTRICTED	INDUSTRIAL	X_TRANSPORTATION
		NO	MILITARY	OTHER.
NAME State	F PROPERTY  Highway Administra  est Preston Street	tion DOT Surve	eyTelephone #:	
CITY.TOWN Baltim	ore	VICINITY OF		Ip code 21201
5 LOCATION	OF LEGAL DESCR	IPTION	T . 1	
			Liber #:	
COURTHOUSE REGISTRY OF DEEDS,	ETC Harford County Co	ourthouse	Folio #:	
STREET & NUMBER				
city.town Belair			STATE Maryland	
6 REPRESEN	ITATION IN EXIST	ING SURVEYS		
TITLE				
DATE				
DEDOCITORY FOR		FEDERAL	_STATE _COUNTY _LOCAL	
DEPOSITORY FOR SURVEY RECORDS				
CITY, TOWN			STATE	



A1.50

CONDITION

\_\_\_\_

CHECK ONE

CHECK ONE

\_\_EXCELLENT

\_\_DETERIORATED
\_\_RUINS

X\_UNALTERED
\_\_ALTERED

X\_ORIGINAL SITE

\_\_FAIR

\_\_UNEXPOSED

\_\_MOVED DATE\_\_\_\_

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

This bridge carries Maryland Route 24 over Deer Creek in a N-S direction. It consists of a single skew three panel Pratt steel through truss, 123' in length. The Portal bracing is of triangular trusses. All connections are riveted.

STATEMENT OF SIGNIFICANCE			Fort Pitt Br Pittsburgh,	
SPECIFIC DAT	ES 1934	BUILDER/ARG	HITECT	
		INVENTION		
X_1900	COMMUNICATIONS	INDUSTRY	POLITICS/GOVERNMENT	OTHER (SPECIFY)
1800-1899	COMMERCE	EXPLORATION/SETTLEMENT	PHILOSOPHY	**TRANSPORTATION
1700-1799	ART	<b>X</b> ENGINEERING	MUSIC	THEATER
_1600-1699	ARCHITECTURE	EDUCATION	MILITARY	SOCIAL/HUMANITARIAN
1500-1599	AGRICULTURE	ECONOMICS	LITERATURE	_SCULPTURE
1400-1499	ARCHEOLOGY-HISTORIC	CONSERVATION	LAW	SCIENCE
PREHISTORIC	ARCHEOLOGY-PREHISTORIC	COMMUNITY PLANNING	LANDSCAPE ARCHITECTURE	RELIGION
ERIOD	AF	REAS OF SIGNIFICANCE CH	IECK AND JUSTIFY BELOW	

See M/DOT Survey general bridge significance.

9 MAIOR BIBLIOGRAPHICAL REFERENCES

File of the Bureau of Bridge Design, State Highway Administration, 301 West Preston Street, Baltimore, Md. drawer 90.

Condit, Carl, American Building Art, 20th Century; New York, Oxford University Press, 1961.

CONTINUE ON SEPARATE SHEET IF NECESSARY

# 10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY \_\_\_

Quadrangle Name: Fawn Grove, MD

Quadrangle Scale: 1:24 000

UTM References:

18.378780.4388740

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE

COUNTY

STATE

COUNTY

# III FORM PREPARED BY

NAME / TITLE

CITY OR TOWN

John Hnedak/M/DOT Survey Manager

Maryland Historical Trust STREET & NUMBER

DATE 1980

TELEPHONE

21 State Circle

(301) 269-2438

STATE

Annapolis

Marvland 21401

W. 57

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust

The Shaw House, 21 State Circle

Annapolis, Maryland 21401

(301) 267-1438





HA-1576 Rocks Bridge M/DOT Hnedak/Meyer Summer 1980



HA-1576 Rocks Bridge M/DOT Hnedak/Meyer Sumer 1980



HA-1576
Rocks Bridge
M/DOT
Hnedak/Meyer
Summer \*\* 1980